

## MODIS IOT Weekly Report

Mission Operations Days: 2000/267 to 2000/273

September 22, 2000 20:00:00 GMT to September 29, 2000 20:00:00 GMT

### Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in Science Mode

Blackbody	A On; B Off	Nominal
Calibration Electronics	A On; B Off	Nominal
Control Processor	A On; B Off	Nominal
Door: Nadir	Unlatched, open	Nominal
Space View	Unlatched, open	Nominal
Solar Diffuser	Unlatched, closed	Nominal
FDDI Formatter	A On; B off	Nominal
FIFO Memory	1 & 2 On; 3 & 4 Off	Nominal
Format Processor	A On; B off	Nominal
PC FPA	A On	Nominal
Power Supply:1	On	Nominal
2	Off	Nominal
PV FPAs: VIS	A On	Nominal
NIR	A On	Nominal
SMIR	A On	Nominal
LWIR	A On	Nominal
Radiative Cooler:		
Outgas Heaters	Off	Nominal
LWIR FPA Heater	On	Nominal
SMIR FPA Heater	Off	Nominal
Scan Assembly	A On; B off	Nominal
SDSM	Off	Nominal
SRCA	Off	Nominal
Survival Heaters: PS1	Enabled	Nominal
PS2	Enabled	Nominal
Timing Generator	A On; B Off	Nominal
Flight Software	Rev BD + 2 patches	Nominal
Inhibit Ids Set	None	Nominal
TMONs enabled	66, 67, 68	Nominal

### This Week's Completed MODIS Activities:

Saturday, September 23, 2000

None

Sunday, September 24, 2000  
None

Monday, September 25, 2000  
None

Tuesday, September 16, 2000  
None

Wednesday, September 27, 2000  
None

Thursday, September 28, 2000  
None

Friday, September 29, 2000  
None

This Week's Scheduled MODIS Activities Not Completed:

None

Upcoming MODIS Events:

Friday, September 29, 2000  
273/20:19:27 ATC Load OA-15: SD/SDSM Open  
273/21:58:20 ATC Load OA-16: SD/SDSM Screened

Saturday, September 30, 2000  
None

Sunday, October 1, 2000  
None

Monday, October 2, 2000  
None

Tuesday, October 3, 2000  
None

Wednesday, October 4, 2000  
278/07:27:08 ATC Load OA-15: SD/SDSM Open  
278/09:06:01 ATC Load OA-16: SD/SDSM Screened

Thursday, October 5, 2000  
None

Friday, October 6, 2000  
None

#### Maneuvers:

The next Drag Makeup Maneuver is planned for October 4<sup>th</sup>.  
The next MODIS Lunar Roll Maneuver is planned for October 17<sup>th</sup>.

#### MODIS Anomalies:

Continued monitoring for formatter errors and loss of cooler margin.

Five formatter errors have been caught by the flight software patch recently, their event times are:

256/14:12:42  
271/12:33:09  
272/07:06:51  
273/04:32:03  
273/06:00:15

The address of each of these errors have been seen previously. The MODIS IOT is currently trending telemetry, orbital position, and other internal/external spacecraft events in an attempt to find the cause of these occasional formatter errors.

#### General Instrument Comments:

MODIS is in Science Mode on the A-side with the SVD and NAD open, operating with the Formatter Resolution Flight Software Patches.

#### MODIS Telemetry Trends:

The Radiative Cooler intermediate stage temperature has slowly been increasing since approximately day 240. During this time the LWIR focal plane heater margin has been decreasing. The IOT is continuing to trend these telemetry mnemonics.

#### Non-MODIS Significant Events:

None

Limited Life Item Status:

SRCA 10W Lamp #1: 173.5 of 500 hours

SRCA 10W Lamp #2: 135.9 of 500 hours

SRCA 10W Lamp #3: 145.1 of 500 hours

SRCA 10W Lamp #4: 61.5 of 500 hours

SRCA 1W Lamp #1: 556.1 of 4000 hours

SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1417 of 3022 Movements

Nadir Aperture Door: 532 of 1316 Movements

Space View Door: 437 of 1316 Movements